Psychological Online Consultation Service Attracts Men: A New Approach to Close the Gap Between Being Ill and Being Treated

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Abstract

Background: *Since 1999, the University Hospital Zurich (Zurich, Switzerland) has offered an e-mail-based consultation service for individual health concerns where anonymous questions can be asked to an online doctor. This study aimed at the characterization of the user profile, the content of the question, and the answers given specific in the field of psychiatry.* ***Materials and Methods:*** *In total, 3,148 questions were asked from 2008 to 2010. Of these, 209 (6.6%) requests were selected by International Classification of Diseases-10 and International Classification of Primary Care codes relevant for psychiatry and included in the retrospective qualitative study. The content analysis of the requests was supported by means of the Mayring inductive category system using a professional text analysis program (MAXQDA).* ***Results:*** *Of the users, 45.9% were female, and 46.9% were male. The mean age was 37.4 years. The main topics of the request were somatoform, somatization, and hypochondriac disorders in 18.4%, behavioral syndromes in 17.9%, and mood disorders in 15.4%. The reason stated most frequently for using the service was looking for a second opinion. The doctors responded with detailed information about disease and treatment and in 70.8% recommended consultation of a physician.* ***Conclusions:*** *Telemedicine is suggested to empower patients by developing health literacy with professional advice. The gender ratio of the users is almost equal, although the prevalence of psychological diseases in the general population is higher in women than in men. Psychological online consultation may potentially reach mentally ill individuals who do not have or did not seek professional help yet, and it seems to be especially attractive for men.*

Key words: *telemedicine, telepsychiatry, e-health, telecommunications*

Introduction

Fifty-one percent of Switzerland's Internet users search for medical information.[1] Individuals consulting the Internet for health questions use a search engine rather than a specific site to get information.[2] The quality of online health information is mixed, and depending on the degree to which individuals interpret and trust this information, it can lead to confusion and anxiety, instead of creating clarity for the information seeker.[3] Nevertheless, the Internet also has a huge potential for healthcare and medical education. Online consultation services make advances toward the development of a new role of the patient being more self-empowered and offer the possibility to become informed about health issues independently from the doctor.[4]

Individuals use the Internet as an information source for medical decisions.[5] This indicates the importance and need to provide reliable, informative Web sites for patients. The Online Consultation Service of the University Hospital Zurich, Zurich, Switzerland, has offered professional advice in response to health questions since 1999. The service is posted on the Web site of the University Hospital Zurich (www.onlineberatung.usz.ch),[4] where individuals can ask an anonymous online question and get a conclusive answer. For complex and specialized requests, the online doctors consult specialists of the University Hospital Zurich and other hospitals with whom they collaborate. The inquiries made to the service cover the full range of medical issues.[6] The service is in particular used to inquire about personal and intimate subjects such as addiction problems, sexual dysfunctions, topics concerning male or female problems, and psychological problems.[7] The anonymous setting has been suggested to be a reason for these findings.

Psychological problems and mental illness are very common diseases and cause a high global burden.[8] Not much is known yet about what individuals are looking for when they turn to the Internet with regard to mental health issues, and what the reasons are for consulting the Web instead of going to see a doctor.[4]

There are different possible forms of the Internet being used for mental health questions: to get information (e.g., to find a psychotherapist, information about mental health, or treatment options) or to communicate with other users (e.g., mailing, discussion boards, or newsgroups).[9] The consultation by e-mail as a medium for asynchronous communication is very popular.[10] Many resources of e-mental health applications and systems exist, ranging from basic information on mental health and psycho-education to self-help therapy and e-counseling,[11] as well as chat rooms and online support groups and communities, where concerned individuals may share their experience.

The current study evaluated requests concerning psychological questions made to the online consulting service of the University Hospital Zurich from January 2008 to November 2010. The aim was to characterize user profile, question content specific to psychiatry, answers of the online doctor, and the rating of the service.

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Materials and Methods

MEDICAL ONLINE CONSULTATION SERVICE

To make a request to the online consulting service of the University Hospital Zurich, the user filled out a Hypertext Transfer Protocol Secure form directly on the platform (www.onlineberatung.usz.ch). Via a secure Secure Sockets Layer connection, the question was sent to the online doctor.[6] In order to receive an answer, the user entered the following forced-choice data through a questionnaire: e-mail address, age and weight (since 2003 these are mandatory), district of domicile (canton) or country (European Union or not), the subject, and the request. Furthermore, they had to decide either to give or to decline consent for scientific evaluation. The indication of further general personal information such as name, gender, height, smoking status, and information about the patient's health specifics such as medication, previous treatments, and symptoms was optional, although providing this information simplified and helped the process of answering for the online physicians. In case of an emergency and of the risk of suicide, this service is not useful, and the online doctors gave immediately information on where to turn to in such situations. The online doctors tried to contact the users by telephone as long as a telephone number was provided.

The requests were answered within 48 h and, since July 2010, within 24 h. The user got an e-mail from the answering physician with a link that led to the server of the University Hospital, where the answer was securely stored. In 2008, a service fee of 75 Swiss Francs was established, which had to be paid by credit card. To guarantee the anonymity of the requestor, the inquiry and the information about the invoice were separated.[6] After getting the answer, the inquirer was invited to voluntarily evaluate the clarity of the answer, the satisfaction about the proposed medical advice, and whether the expectations have been met or not.

DATA ANALYSIS

Qualitative analyses of the content of 209 questions and answers from January 2008 to November 2010 were part of this retrospective study. The online service received 3,148 questions during this period. A code was assigned to the question by the answering physician by either or both of the classification systems of International Classification of Diseases (ICD)-10 or International Classification of Primary Care-2. To get the data of requests concerning psychological topics, the above-referenced classification system was used to search for a code F of ICD-10 or code P of International Classification of Primary Care-2, either of which classifies psychological diseases or symptoms and mental disorders. Two hundred seventy-four questions were found. Of those, 14 have been excluded because patients had declined consent for scientific evaluation. An additional 35 have been excluded because they were incomplete, and 16 were duplicates in the system or requests by the same person regarding the same topic. All e-mails were written in German. The study was approved by the cantonal ethics committee.

To analyze the content of the remaining 209 questions and answers, the procedure of inductive category development described by Mayring[12] was used. The professional text analysis program MAXQDA version 10 (VERBI Software, Berlin, Germany),[13] a tool that is used in the social sciences to provide systematic analysis and interpretation of texts, supported the development of theoretical conclusions. To describe similarities of the codes, the data were exported to Microsoft (Redmond, WA) Excel® to evaluate relative frequencies. Each request has been read and manually categorized by the following subjects of interest (*Table 1*). Multiple coding of categories was possible.

Results

Of all the questions ($n=3,148$) asked through the online consulting service in the observed interval, 8.7% ($n=274$) of the requests were of a psychological content, and 6.7% ($n=209$) were included in the qualitative content analysis.

PERSONAL QUALITIES OF THE USER

Gender and age. Of the users, 45.9% ($n=96$) were female, 46.9% ($n=98$) were male, and 7.2% ($n=15$) gave no information about the

Table 1. Categories of Analysis

CATEGORIES	SUBCODES
1. Personal characteristics of the user	Gender
	Age
	Concerned person
	Medical history
	Previous doctor visits
2. Content	
a. Content of question	In accordance with ICD-10[24]
	Symptoms
	Duration of symptoms
b. Content of request	Information on treatments
	Statement about the mentioned symptoms
	Information about diagnostic
	Information about a certain disease
	Help and advice
	Information about general health items
c. Purpose	Reasons using the online consulting service
3. Response of online service	Type of information
	Recommendation of consultation
	Differential diagnosis
4. Rating of the answer	Clarity
	Suggested medical advice
	Expectation

ICD, International Classification of Diseases.

gender. The mean age was 37.4 years (standard deviation = 16.1). The distribution of age is shown in *Table 2*. The youngest person was 2 years old (the parents were asking for their child), and the oldest was 85 years. A total of five users did not indicate their age.

Concerned person. Of the users, 73.2% ($n = 153$) asked a question for themselves. In 21.1% of cases ($n = 44$) the question was asked for somebody else like family members, friends, partners, care staff, teachers, and others. In 5.7% ($n = 12$) of the cases it was not clear for whom the question was asked.

Medical history. Of the users, 55.5% ($n = 116$) gave information about their medical history. Of these, 6.2% ($n = 42$) reported having had a certain psychological disease, 37.9% ($n = 44$) to having had psychiatric treatment, and 4.3% ($n = 5$) indicated a psychosomatic disease. Three users talked about previous suicide attempts. Of the users, 49.1% ($n = 57$) mentioned a somatic illness, and 27.6% ($n = 32$) mentioned having had treatment for a somatic problem or surgeries. Of all users, 25.4% ($n = 53$) had not had diseases or previous treatment, and 19.1% ($n = 40$) did not give any information about their medical history.

Past physician contact. Of the users, 39.7% ($n = 83$) reported having already seen a doctor because of their problem. Of these 83 people, 36.1% ($n = 30$) went to the family doctor, 30.1% ($n = 25$) had seen a psychiatrist, 28.9% ($n = 24$) went to see a specialist other than psychiatrist, 12.0% ($n = 10$) went to several specialists, and 8.4% ($n = 7$) went to the hospital.

CONTENT OF QUESTION

Topic based on ICD-10. In the 209 requests, we categorized 234 topics in total; in 24 questions, users gave more than one topic. Most questions were about somatoform, somatization, and hypochondriac disorders (18.4%, $n = 43$ [ICD-10 F44–F45]), followed by behavioral syndromes associated with physiological disturbances and physical factors ($n = 42$, 17.9%] [ICD-10 F50–F59]) and mood disorders ($n = 36$, 15.4% [ICD-10 F30–F39]) (*Table 3*).

Symptoms. Of the users, 83.7% ($n = 175$) gave information about the personal problem by describing symptoms, and 21.1% ($n = 44$) did so by naming a diagnosis. *Table 4* shows details about the most frequently mentioned symptoms ($n = 320$).

Duration of the symptoms. Of the symptoms, 45.7% ($n = 80$) were chronic (more than 6 months), 8.6% ($n = 15$) were subacute (1–6 months), 13.7% ($n = 24$) were acute (less than 1 month), and 32.0% ($n = 56$) did not provide clear information about the duration of their symptoms.

CONTENT OF REQUEST

The vast majority of users made more than one request for information in one question. Most users (68.9%, $n = 144$) wanted to know about treatment, 22.0% ($n = 46$) asked the online doctor for a statement and opinion about their symptoms, 14.8% ($n = 31$) of all inquirers wanted to know about a certain type of diagnostic investigation, 11.5% ($n = 24$) asked a question about a disease, 5.7% ($n = 12$) sought help and advice, 3.3% ($n = 7$) wanted to know more

Table 2. Age Distribution

AGE INTERVAL (IN YEARS)	FREQUENCY (%)
Under 20	23 (11.3)
21–40	106 (52.0)
41–60	54 (25.5)
Over 60	21 (10.3)
Total	204 (100)

Table 3. Topics by International Classification of Diseases-10

ICD-10 CODE: TOPIC	FREQUENCY	%
F00–F09: Organic or symptomatic mental disorders	10	4.3
F10–F19, F55: Problems of addiction or use of harmful substances	24	10.3
F20–F29: Schizophrenia, schizotypal and delusional disorders	2	0.9
F30–F39: Mood (affective) disorders	36	15.4
F40–F42, F48: Neurotic disorders: anxiety and obsessive-compulsive disorders	31	13.2
F43: Reaction to severe stress and adjustment disorder	7	3.0
F44–F45: Somatoform, somatization and hypochondriasis	43	18.4
F50–F59: Eating and sleep disorders, sexual dysfunction	42	17.9
F60–F69: Disorders of adult personality and behavior	16	6.8
F70–F79: Mental retardation	0	0
F80–F89: Disorders of psychological development	4	1.7
F90–F98: Behavioral/emotional disorders in childhood/adolescence	14	6.0
F99: Unspecified mental disorders	5	2.1
Total number of topics ($n = 234$)	234	100
Request with more than one topic ($n = 209$)	24	11.5

ICD, International Classification of Diseases.

Table 4. Symptoms Most Frequently Mentioned ($n=320$)

SYMPTOM	*N*
Sleep disorder	33
Anxiety and fear	33
Sexual dysfunctions	24
Gastrointestinal symptoms	22
Attention deficit disorder, disturbance of memory	20
Sensation of heat or cold	18
Fatigue, no energy	17
Symptoms of heart and circulation	17
Pain	16
Dizziness	13
Paraesthesia	13
Problems with swallowing, globus sensation	13
Sad, unhappy, down, depressed	13
Aggressive, impulsive, lack of control of impulse	11
Headache	10
Tinnitus	10
Not specific	10
Lack of self-consciousness, self-hate	8
Thoughts of suicide, fear that somebody could hurt him- or herself	7
Imbalance of affection	6
Craving, behavior of dependence	6

about general health issues, and in 1.4% ($n=3$) of cases, it was not clear what information the person requested.

One hundred forty-four questions were asked about the therapy of a disease. Of those, the greatest proportion of questions was about treatment in general (37.5%, $n=54$). The second most common question topic (35.4%, $n=51$) was about medication, followed by 18.8% ($n=27$) who were looking for a psychiatrist. Of other concerned users, 11.1% ($n=16$) wanted to know about remedies against impotence, 6.9% ($n=10$) about surgical intervention such as sympathectomy or sexual reassignment surgery, and 6.3% ($n=9$) about measures against substance dependence. Requests about diagnostics (14.8%, $n=31$) were mostly about general examinations, and a few questions were about diagnostics.

PURPOSE OF REQUEST

Reasons for using the online service. In 71 questions (34.0%) this code could be evaluated. The named reasons are shown in *Table 5*.

Table 5. Reasons for Using the Online Service

REASON	RELATIVE INCIDENCE
Second opinion	28.2%
Treatment still unsuccessful	23.9%
Physician doesn't know advice, dissatisfaction with physician	14.1%
Shame and inhibition to go and see a doctor	12.7%
Don't know where to find or didn't find help	11.3%
Anonymity	5.6%
Living abroad	2.8%
Last hope	1.4%

RESPONSES OF THE ONLINE SERVICE

Kind of information. In 68.4% ($n=143$) of all the answers, the responders gave information about refuges, shelters, and places where people can get further help. In 58.9% of the answers ($n=123$), the doctors explained a disease, its pathophysiology, and its symptoms, and 52.6% ($n=110$) explained a certain therapy. In 27.3% ($n=57$) the physicians gave advice for coping strategies and general life measures. In 15.3% ($n=32$) of the answers, a Web site or a book with further information was indicated, and 14.4% ($n=30$) informed about diagnostics.

Recommendation of consultation. In 70.8% ($n=148$) the online doctors recommended visiting and consulting a physician. Of the suggested specialists, 62.2% ($n=92$) of recommendations were to see a psychiatrist, 32.4% ($n=48$) to see a somatic specialist, 4.1% ($n=6$) to go to the hospital, and 1.4% ($n=2$) to see other physicians. Reasons for these recommendations were that the online doctors wished for more clarification or that somatic reasons had to be excluded in many cases.

Differential diagnosis. Of the answers, in 23.4% ($n=49$) the doctors answered that they could not make a diagnosis from afar, in 23.0% ($n=48$) the doctor assumed a possible diagnosis, and in 28.2% ($n=59$) they made a differential diagnosis where they listed several possible reasons for the mentioned problem.

RATING OF THE ANSWER

After getting the answer the inquirer was invited to evaluate the service. The user could rate the clarity of the answer, the satisfaction about the medical advice, and if the expectations were met. Of the responses, 97.8% rated the clarity, 73.7% the medical advice, and 80.6% the fulfilled expectation as "very good" and "good" (*Table 6*).

Discussion

The current retrospective study aimed at disentangling the question content of psychiatry-related questions of the online consultation service of the University Hospital Zurich. Furthermore, reasons

Table 6. Satisfaction with the Answer

	CLARITY	SUGGESTED MEDICAL ADVICE	FULFILLED EXPECTATION
Total number ($n=209$)	93	91	88
% of all questions	44.5%	43.5%	42.1%
Rating			
Very good	67.7%	41.8%	38.6%
Good	30.1%	31.9%	42.0%
Average	2.2%	23.1%	14.8%
Bad	0%	2.2%	3.4%
Very bad	0%	1.1%	1.1%

for using the online service and satisfaction with the answers were analyzed, and gender ratios were assessed. Most questions were asked about somatoform diseases (ICD-10 F44–F45), behavioral syndromes associated with physiological disturbances and physical factors (ICD-10 F50-59), and mood disorders (ICD-10 F30–F39). Overall satisfaction with the answers was good. It is interesting that about half of the users were male.

The number of people with psychological diseases is increasing, but the majority of mentally ill individuals do not have access to medical help,[14] are treated inappropriately, or do not receive professional treatment at all.[15] According to a report by the Swiss health observation institute OBSAN, only around 3% of men and 5% of women are treated by a specialist because of their psychological problem.[16] Online services with their anonymous character could allow individuals to feel easier to talk about psychological items and might improve the willingness to seek medical help.

The gender ratio in the currently observed population is almost equal between women and men. This is an interesting finding because the majority of users using the online service of the University Hospital Zurich are women (59.7% were female and 40.3% were male in 2008 with regard to all question topics[7]), and the prevalence of psychological diseases in the general population is higher in women than in men (48.9% females, 36.8% males[17]). Furthermore, the OBSAN report says that men are looking for psychological professional help less often than women.[16] The relatively high number of men using the service for psychological questions could signify its attractiveness to men. Our findings do not confirm those of a previous online study showing female predominance in people with chronic anxiety.[18] However, this could be caused by the different psychological topics asked in the current study. Nevertheless, previous studies of the University Hospital Zurich Online Consultation Service have shown a clear focus on intimate and sensitive issues. Especially in men, questions about sexual transmitted diseases were of particular interest.[4,7] The current results suggest that online consultation services[7] could diminish treatment barriers, especially for men with psychological problems, because questions can be asked anonymously and a face-to-face setting can be avoided.

Mental disorders are very sensitive issues and still associated with societal stigmatization and discrimination.[19] Furthermore, they are one of the most common diseases among the public. One study[20] estimated that 27% of the European public between the ages of 18 and 65 years has been affected by at least one mental disorder in the past 12 months. The most frequent disorders are somatoform, substance dependence, anxiety, and depressive disorders,[20] which reflect also the questions most frequently asked in this study. Beside those, sleeping and eating disorders are the most frequently asked topics. Somatoform, somatization, and psychosomatic problems (ICD-10 F40–F45) are problems frequently occurring in the general population. They often take a chronic course, and individuals have already been suffering and despairing for a long time, but doctor visits are unsatisfactory because no underlying condition can be found. Online consultation services could provide unprejudiced information. This confirms previous results that suggested that tele-advice might be overused by chronically ill and frustrated patients looking desperately for additional information.[21]

Eighty-eight users (42.1%) of the current study recorded in their evaluation that meeting their expectations was very good (38.6%) or good (42%). This might be due to a previous lack of information. Nearly all users (97.8%) were satisfied (67.7% very good and 30.1% good) with the clarity of the information. The online doctors are particularly trained to explain to nonprofessionals the complex medical content, and they were able to meet this requirement; 41.8% rated the medical advice as very good, and 31.9% rated it as good. Not all requests are suitable for an online consultation, and therefore the judgment by the user is not always clear. The open structure of the questionnaire and the fact that in only 55.5% of cases was information about medical history available made it in some cases difficult to provide satisfactory medical advice for the user. In 80.6% (38.6% very good and 42% good) of cases, the expectation of the user could be fulfilled, and therefore the confidence in a medical teleconsultation was improved.[4]

The knowledge about the characteristics of the users, their possible reasons for using a telemedical communication tool, and the kind of information they are seeking could contribute to improved services, which meet the needs of the patients and ultimately increase their benefit. The content of the questions asked and the information sought in this study may reflect solution-oriented users. This is indicated by questions about specific treatment strategies asked by users who already have certain knowledge about their disease. Patients are claiming more responsibility and control with regard to their health.[22] The growing availability of information sources such as the Internet leads to more health literacy in individuals. The information provided on health Web sites, as well as advice given through helpdesks, could enable users to develop better self-help tactics. Information about symptoms, diseases, treatment strategies, and diagnostics may increase users' knowledge about health, enlarge their competence at estimating the significance of a symptom, and lead them to knowledge about helpful treatment.

In most of the questions, users asked for an opinion or a statement about a certain symptom. This indicates that users already have distinct information but do not know how to weigh and judge it. The Internet is frequently used for health questions.[2,3] Fifty-one percent of the Swiss population has looked for information about health on the Internet.[1] To classify the large amount of information found on the Internet, the online consultation service could act as a mediator for quality control through professional advice and by providing high-quality reliable information.

In this current study, one-third of the inquirers named reasons for using the Internet service. Most users were looking for a second opinion; 39.7% of users had already seen a physician and still had questions concerning their problem, were dissatisfied with the suggested measures taken by their doctor, or thought that the treatment was insufficient. Therefore, online services as a source for further information about health issues could be a certain form of quality or security control for individuals. Thus, individuals could be strengthened in their health decisions, which could improve compliance with treatment strategies. Of the 39.7% of the users in this study who mentioned previous doctor visits, 30.1% had been seeing a psychiatrist. This shows that not all of the users requiring the online service do it for lack of access to treatment, and it could reflect the reason of using it as a tool for seeking a second opinion. A study conducted in Australia surveyed patients receiving treatment in a private psychiatric practice who used the Internet to get mental health-related information; they found that one-third of the individuals getting information on the Internet discussed this with their psychiatrist, and those who did so were more likely to report an influence on their decision-making process.[23] Therefore, providing online information could be helpful in the decision-making process of patients and thereby increase their health literacy.

The possibility to get advice for a friend or relative could be another advantage of the online consultation service, as in 21.1% of the requests of the current study it was being used for that particular reason. By getting advice on how to help a significant other who might ignore the illness or refuse to visit a doctor, the user might be able to handle the situation in a better way. This could prevent destabilizing psychological processes, which otherwise would set in.

A limitation of the study is that the number of inquiries is small, and the information given by the users might not be complete because of the open structure of the questionnaire. Furthermore, the inability to ask the user further queries might have limited the comprehensiveness of the medical advice.

Conclusions

In conclusion, it is suggested that telemedicine empowers patients by combining health literacy with professional advice. In particular, men who normally tend to avoid professional help were attracted by the online consultation. Thus, consultation services may potentially reach mentally ill individuals who do not have or did not seek professional help yet. Furthermore, online consultation services, often used to get a second opinion, could meet a patient's needs and complement the traditional face-to-face consultation by providing additional information.

Disclosure Statement

No competing financial interests exist.

REFERENCES

1. BAG. Digitalisierung im *Gesundheitswesen. Spectra—Gesundheitsförderung und Prävention.* **2012;**94:1–12.
2. Smith PK, Fox AT, Davies P, Hamidi-Manesh L. Cyberchondriacs. *Int J Adolesc Med Health* **2006;**18:209–213.
3. Morahan-Martin JM. How Internet users find, evaluate, and use online health information: A cross-cultural review. *Cyberpsychol Behav* **2004;**7:497–510.
4. Neuhaus Buhler RP, Scheuer E. [The online-consultation of the University Hospital Zurich]. *Praxis (Bern 1994)* **2005;**94:855–860.
5. Couper MP, Singer E, Levin CA, Fowler FJ Jr, Fagerlin A, Zikmund-Fisher BJ. Use of the Internet and ratings of information sources for medical decisions: Results from the DECISIONS survey. *Med Decis Making* **2010;**30(5 Suppl):106S–114S.
6. Brockes MC, Neuhaus Buhler RP, Schulz E, Neumann CL, Schmidt-Weitmann S. [Online medical consulting service at the University Hospital Zurich before and after introduction of a service fee]. *Dtsch Med Wochenschr* **2010;**135:231–235.
7. Brockes C, Schmid-Weitmann S, Buser J, Gerke W, Hermann F, Baumann D. Virtuelle Patientenberatung im Universitätsspital Zürich. *e-beratungsjournal* **2008;**(4. Jahrgang, Heft 2, Oktober 2008):Artikel 7.
8. Ebner DG, Kurt DH. Positionspapier: Direkter Zugang/Verdoppelung des Selbstbehaltes für psychisch Kranke, Psychische Krankheiten—häufig jedoch kaum adäquat behandelt. *Psy & Psy, FMPP Foederatio Medicorum Psychiatricorum et Psychotherapeuticorum.* Bern: EMH Schweizerischer Ärzteverlag AG, **2009.**
9. Eichenberg C. Das Internet als therapeutisches Medium—Selbsthilfe und Intervention. *Dtsch Ärztebl* **2004;**101(19):14.
10. Föderation Schweizer Psychologen. Kompetenzprofil der Psychologischen Online Beratung. **2003.** Available at www.psychologie.ch/de/publikationen/dokumentation/reglemente/kompetenz_online/printhtml (last accessed November 3, 2014).
11. Oh E, Jorm AF, Wright A. Perceived helpfulness of websites for mental health information: A national survey of young Australians. *Soc Psychiatry Psychiatr Epidemiol* **2009;**44:293–299.
12. Mayring P. Kombination und Integration qualitativer und quantitativer Analyse. *Forum Qual Soc Res* **2001;**2(1):6. Available at http://www.qualitative-research.net/index.php/fqs/article/viewArticle/967 (last accessed November 10, 2014).
13. Kuckarzt U. Realizing mixed methods approaches with MAXQDA. **2010.** Available at www.maxqda.de/download/MixMethMAXQDA-Nov01-2010.pdf (last accessed November 10, 2014).
14. Fasel T, Frick U, Baer N. *Dynamik der inanspruchnahme bei psychischen problemen: Soziodemographische, regionale, krankheits- und systembezogene indikatoren.* Neuchâtel, Switzerland: Schweizerisches Gesundheitsobservatorium (Obsan), **2010.**
15. Schnyder U. Future perspectives in psychotherapy. *Eur Arch Psychiatry Clin Neurosci* **2009;**259(Suppl 2):S123–S128.
16. Rüesch P, Manzoni P. *Psychische gesundheit in der schweiz—Monitoring.* Neuchâtel, Switzerland: Schweizerisches Gesundheitsobservatorium (Obsan), **2003.**
17. Lieb K, Frauenknecht S, Brunnhuber S. *Intensivkurs Psychiatrie und Psychotherapie*, 6th ed. München: Elsevier, Urban & Fischer, **2009:**452.
18. Rufer M, Moergeli H, Moritz S, Drabe N, Weidt S. Alexithymia and non-treatment: An Internet based study of 312 people with chronic anxiety. *Compr Psychiatry* **2014;**55:179–187.

19. Angermeyer MC. [Stigmatization of mentally ill patients by the society]. *Psychiatr Prax* **2004;**31(Suppl 2):S246–S250.

20. Wittchen HU, Jacobi F. Size and burden of mental disorders in Europe—A critical review and appraisal of 27 studies. *Eur Neuropsychopharmacol* **2005;**15: 357–376.

21. Eysenbach G, Diepgen TL. Patients looking for information on the Internet and seeking teleadvice: Motivation, expectations, and misconceptions as expressed in e-mails sent to physicians. *Arch Dermatol* 1999;135:151–156.

22. Johnson MO. The shifting landscape of health care: Toward a model of health care empowerment. *Am J Public Health* **2011;**101:265–270.

23. Lam-Po-Tang J, McKay D. Dr Google, MD: A survey of mental health-related internet use in a private practice sample. *Australas Psychiatry* **2010;**18: 130–133.

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